

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

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1-16. (Cancelled)

17. (New) A sample instrument for use with a fluidic cartridge, said cartridge having first and second analysis regions, said instrument comprising:

a cartridge holder for engaging said cartridge;

AI a flow cytometric measuring apparatus positioned to be optically coupled with said first analysis region, said flow cytometric measuring apparatus comprising a first light source, a first photodetector and a second photodetector; and

an absorption measuring apparatus positioned to be optically coupled with said second analysis region, said absorption measuring apparatus comprising a second light source and a third photodetector.

18. (New) The instrument of claim 17 wherein said first photodetector is positioned to collect scattered light from said first analysis region.

19. (New) The instrument of claim 18 wherein said second photodetector is positioned to collect scattered or fluorescent light from said first analysis region.

20. (New) The instrument of claim 17 wherein said cartridge has cartridge alignment markings thereon and wherein said holder has alignment markings thereon to mate with said cartridge alignment markings.

21. (New) The instrument of claim 17 wherein said cartridge contains a pump interface and wherein said instrument further comprises a pump mechanism positioned to couple with said pump interface.

22. (New) The instrument of claim 21 wherein said pump interface is a syringe pump interface and wherein said pump mechanism is a syringe pump.

23. (New) The instrument of claim 17 wherein said cartridge contains a valve interface and wherein said instrument further comprises a valve mechanism positioned to couple with said valve interface.

24. (New) The instrument of claim 23 wherein said valve interface is a pinch valve interface and wherein said valve mechanism is a pinch valve mechanism.

25. (New) The instrument of claim 17 wherein said cartridge is disposable.

26. (New) The instrument of claim 17 wherein said first light source comprises a laser.

27. (New) The instrument of claim 17 wherein said second light source and said third photodetector are positioned to be on opposite sides of said cartridge.

28. (New) The instrument of claim 17 wherein said first light source and said first photodetector are positioned to be in the same plane as a stream of particles flowing through said first analysis region.

29. (New) The instrument of claim 28 wherein, relative to the stream of particles, said first light source is positioned upstream of said first photodetector.

30. (New) The instrument of claim 28 wherein said first light source comprises a laser.

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